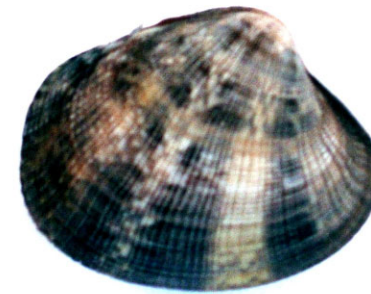


Considerations on the fine scale topography in sand flats, habitat heterogeneity and refuges for clams



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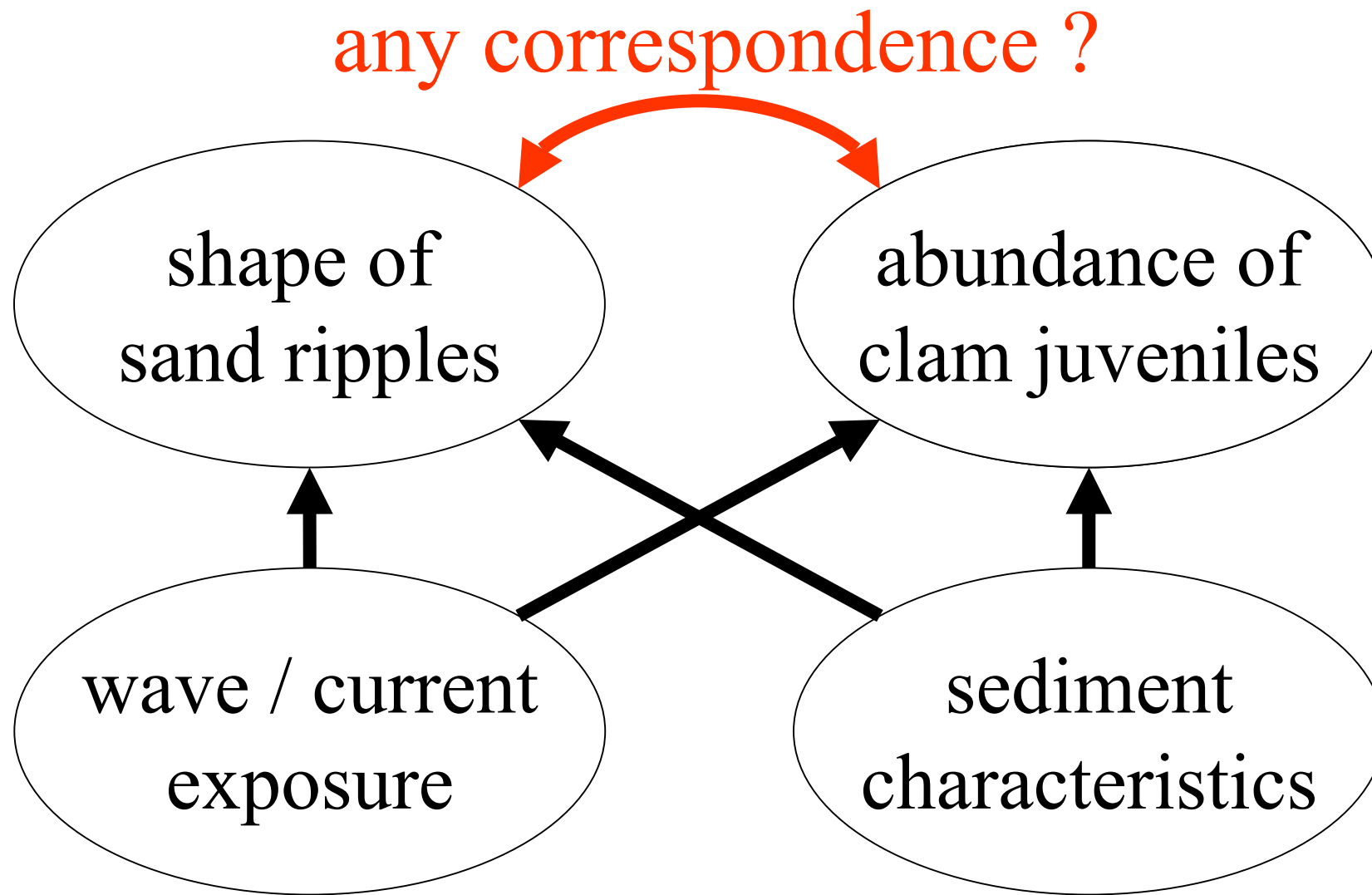
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Funded by the Special Coordination Funds for Promoting Science and Technology,
the Ministry of Education, Culture, Sports, Science and Technology of Japan.

Objective

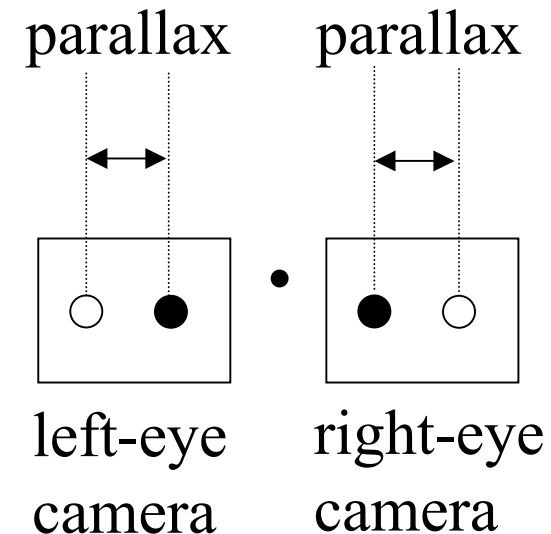


Method for taking stereo-pictures and 3D analysis of the sand surface



Six sediment samples from crests and troughs sieved through 1 mm mesh screen

Vertical distance was computed from the parallax using PI-3000 (Topcon Co.)

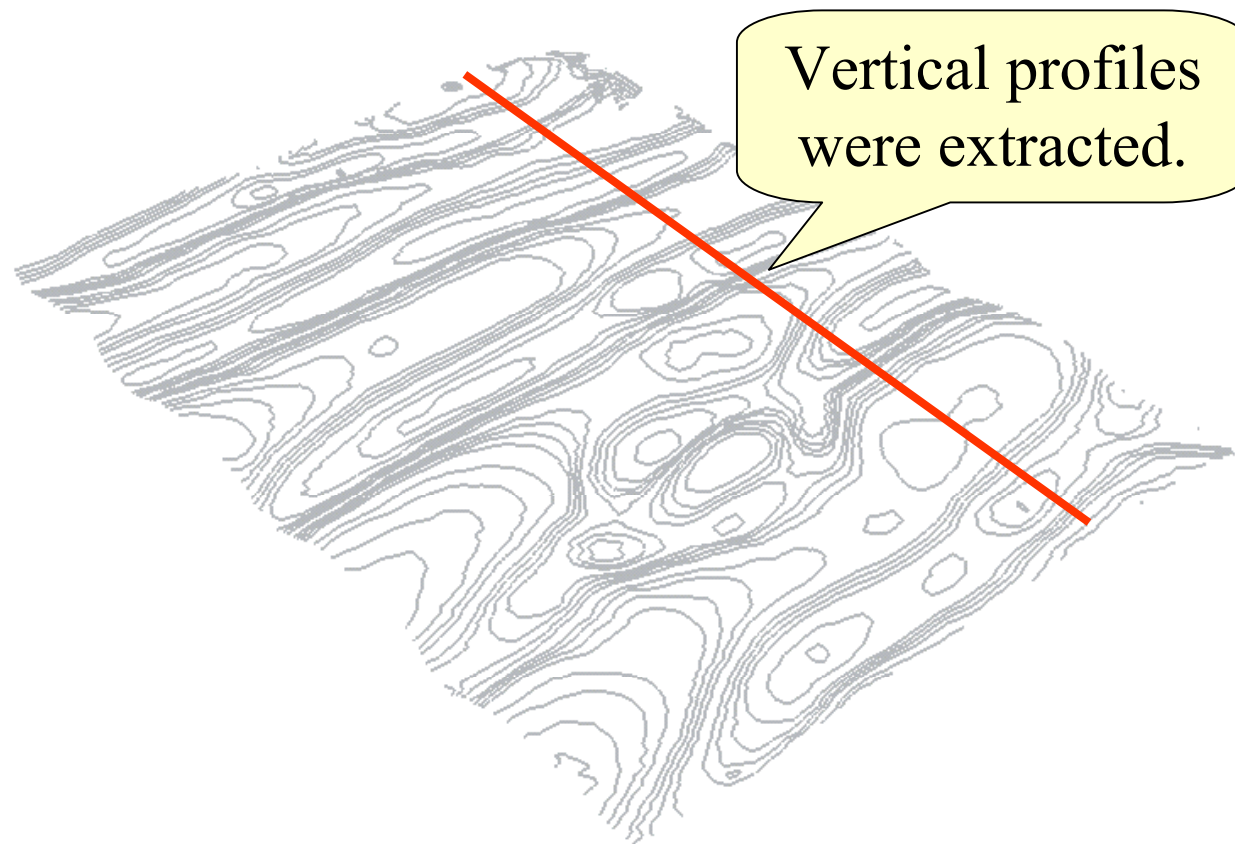


An example of 3D picture of sand ripples



Ripples on the crest of the middle sandbar

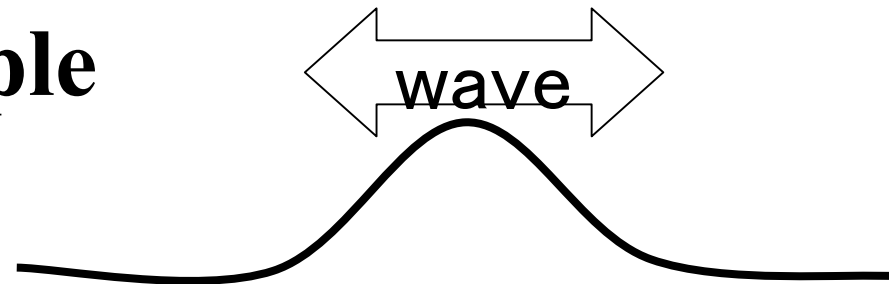
An example of contour plot of sand ripples



Ripples on the crest of the middle sandbar

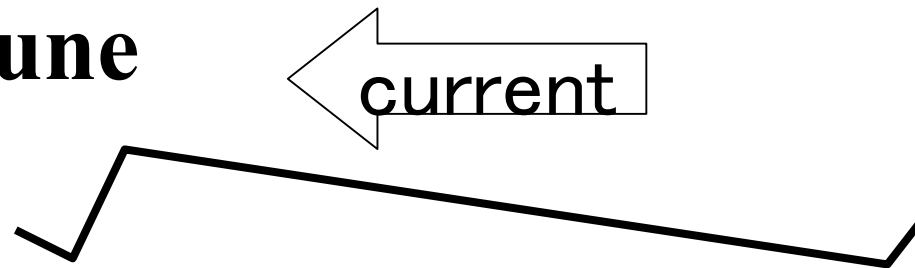
Summary

wave ripple

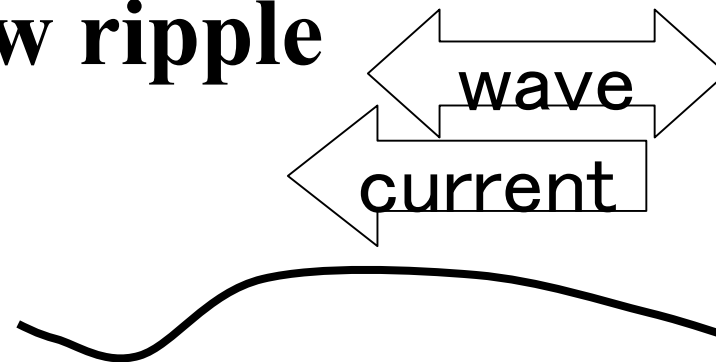


abundant

current dune



mixed flow ripple



sporadic

illustrated after tentative definitions in Kleinhans (1995)